

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A water repelling cap for a container having an opening with a rim, said cap comprising:

a closure shell; and

a non-wetting material layer comprising a primer and an additive in amounts effective for rendering said material layer non-wetting, and deposited over at least a portion of an inside surface of said closure shell, wherein said material layer is an outermost layer of said cap.

Claim 2 (Original): The water repelling cap of claim 1, wherein said portion comprises an area between an edge of said cap and a region of said inner surface in a sealing contact with said opening.

Claim 3 (Currently Amended): The water repelling cap of claim 1, wherein said non-wetting material layer comprises at least one of a polyvinyl chloride, a polyester, a ~~polyketone~~ polyketone, an epoxy, a phenolic, and a ~~polyacrylic~~ polyacrylic.

Claim 4 (Currently Amended): The water repelling cap of claim 3, wherein a ~~composition of said non-wetting material layer further~~ said additive comprises Zonyl ZONYL.

Claim 5 (Currently Amended): The water repelling cap of claim 4, wherein a ~~Zonyl~~ ZONYL concentration in said ~~composition~~ non-wetting material layer has a dry weight ratio ranging from approximately 1 to approximately 10%.

Claim 6 (Currently Amended): The water repelling cap of claim 5, wherein said dried concentration is ~~preferably~~ about 4%.

Claim 7 (Currently Amended): The water repelling cap of claim 3, wherein said ~~non-wetting material layer is~~ primer comprises a PVC-free lacquer.

Claim 8 (Currently Amended): The water repelling cap of claim 7, wherein said ~~non-wetting material layer~~ PVC-free lacquer comprises at least one of a polyester and an epoxy-phenolic resin.

Claim 9 (Currently Amended): The water repelling cap of claim 8, wherein a ~~composition of said non-wetting material layer further~~ said additive comprises ~~Teflon~~ TEFLON.

Claim 10 (Currently Amended): The water repelling cap of claim 9, wherein a ~~Teflon~~ TEFLON concentration in said ~~composition~~ non-wetting material layer has a dry weight ratio ranging from approximately 1 to approximately 10 %.

Claim 11 (Currently Amended): The water repelling cap of claim 10, wherein said dried concentration is ~~preferably~~ about 7 %.

Claim 12 (Original): The water repelling cap of claim 1, wherein said closure shell is one of a crown cap, and a roll-on cap.

Claim 13 (Withdrawn - Currently Amended): A method for manufacturing a water repelling cap, comprising:

providing a metallic sheet having a top surface and a bottom surface;

applying a non-wetting material layer comprising a primer and an additive in amounts effective for rendering said material layer non-wetting, to one of said surfaces; and

forming said cap from said metallic sheet, wherein said material layer is an outermost layer of said cap.

Claim 14 (Withdrawn): The method of claim 13, further comprising applying a coat of varnish to said metallic sheet and curing said coat of varnish before applying said non-wetting material layer.

Claim 15 (Withdrawn): The method of claim 14, further comprising transferring an ink to said metallic sheet, so as to imprint thereon at least one of a brand logo, a producer logo, and a promotional message, and curing said ink before applying said material layer.

Claim 16 (Withdrawn - Currently Amended): The method of claim 13, wherein said non-wetting material layer comprises at least one of a polyvinyl chloride, a polyester, a ~~poliketone~~ polyketone, an epoxy, a phenolic, and a ~~poliacrylic~~ polyacrylic.

Claim 17 (Withdrawn - Currently Amended): The method of claim 16, wherein a ~~composition of said non-wetting material layer further~~ said additive comprises ~~Zonyl~~ ZONYL.

Claim 18 (Withdrawn - Currently Amended): The method of claim 17, wherein a ~~Zonyl~~ ZONYL concentration in said ~~composition~~ non-wetting material layer has a dry weight ratio ranging from approximately 1 to approximately 10%.

Claim 19 (Withdrawn - Currently Amended): The method of claim 18, wherein said dried concentration is ~~preferably~~ about 4%.

Claim 20 (Withdrawn - Currently Amended): The method of claim 13, wherein said ~~non-wetting material layer~~ is primer comprises a PVC-free lacquer.

Claim 21 (Withdrawn - Currently Amended): The method of claim 20, wherein said ~~non-wetting material layer~~ PVC-free lacquer comprises at least one of a polyester and an ~~epoxy-phenolic~~ epoxy-phenolic resin.

Claim 22 (Withdrawn - Currently Amended): The method of claim 21, wherein a ~~composition of said non-wetting material layer further~~ said additive comprises ~~Teflon~~ TEFLON.

Claim 23 (Withdrawn - Currently Amended): The method of claim 22, wherein a ~~Zonyl~~ TEFLON concentration in said ~~composition~~ non-wetting material layer has a dry weight ratio ranging from approximately 1 to approximately 10 %.

Claim 24 (Withdrawn - Currently Amended): The method of claim 23, wherein said dried concentration is ~~preferably~~ about 7 %.

Claim 25 (Withdrawn - Currently Amended): A method for manufacturing a water repelling cap, comprising:

providing a metallic sheet;

forming at least one cap from said metallic sheet; and

applying a non-wetting material layer comprising a primer and an additive in amounts effective for rendering said material layer non-wetting to at least a portion of an inner surface of said cap, wherein said material layer is an outermost layer of said cap.

Claim 26 (Withdrawn): The method of claim 25, wherein said applying comprises applying said non-wetting material layer to an area between an edge of said cap and a region of said inner surface in a sealing contact with said opening.

Claim 27 (Withdrawn - Currently Amended): A method for manufacturing a water repelling cap, comprising:

providing a roll-on metallic cap; and

applying a non-wetting material layer comprising a primer and an additive in amounts effective for rendering said material layer non-wetting to at least a portion of an inner surface of said cap, wherein said material layer is an outermost layer of said cap.

Claim 28 (Original): A water repelling cap for a container having an opening with a rim, said cap comprising:

a closure cap; and

non-wetting means for repelling moisture from confined regions between an inside surface of said cap and an outside surface of said container.

Claim 29 (Original): The water repelling cap of claim 28, wherein said non-wetting means is disposed substantially on an area between an edge of said cap and a region of an inner surface of said container in sealing contact with said opening.

Claim 30 (Original): The water repelling cap of claim 28, wherein said cap is a linerless cap.

Claim 31 (Original): The water repelling cap of claim 28, wherein said cap is one of a crown cap and a roll-on cap.

DISCUSSION OF THE AMENDMENT

The specification and claims have been amended by correcting spellings and capitalizing trademarks. In addition, the description of contact angle vis-à-vis wetting has been corrected. Support for the latter amendment can be found, for example, in Wikipedia, under “Wetting”, and in “Contact Angles AN 102” in http://www.ksvinc.com/contact_angle.htm. Copies of these references are **enclosed herewith**.

Claim 1 has been amended to recite that the non-wetting material layer comprises a primer and an additive in amounts effective for rendering the material layer non-wetting, as supported in the specification at paragraphs [0017]-[0018], and that the material layer is an outermost layer of the cap, which is inferentially supported throughout the specification based on the function of the non-wetting material layer, and particularly by Figs. 1 and 2. A clerical error has been corrected in Claim 23. The term “preferably” has been deleted in Claims 6, 11, 19 and 24. The remaining amendments have generally been made to be consistent with the above-discussed amendment to Claim 1.

No new matter is believed to have been added by the above amendment. Claims 1-31 remain pending. Claims 1-12 and 28-31 are active. Claims 13-27 stand withdrawn from consideration, but are rejoinable.